6. (amended) A color filter comprising:

a filter element of a first color, said first color filter element having a filter layer of a second color overlapping a portion of a filter layer of a third color,

wherein said first, second and third colors are different from each other, and

wherein the second color layer is both in the same row as the third color layer and the second color layer is in a row above the third color layer.

12. (amended) A solid-state imaging device comprising:

a plurality of light receiving sensor portions for photo-electric conversion, provided in a surface layer portion of a substrate; and

a color filter provided correspondingly to said plurality of light receiving sensor portions;

wherein said color filter has a filter element of a first color having a filter layer of a second color overlapping a portion of a filter layer of a third color.

REMARKS/ARGUMENTS

This is in full and timely response to the non-final Office Action mailed November 7, 2002, submitted concurrently with a Petition to extend to with the first extended month. By this amendment, claims 1, 6 and 12 were amended. Support for these amendments can be found variously throughout the specification, for example, in Figs. 1A-1C. No new matter was added. Claims 1-17 remain pending in this application, with claims 1, 6 and 12 being independent.

Rejections Under 35 U.S.C. §102:

Claims 1-2, 4, 6-7 and 9-16 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,876,167 to Snow et al. Applicants respectfully traverse this rejection.

Claim 1 recites a method of producing a color filter, comprising the steps of: forming a filter layer of a second color in a substrate region in which a filter element of a first color is to be formed; and overlapping a filter layer of a third color different from said second color on said filter layer of said second color and on said substrate; wherein two overlapping filter layers form the filter element.

Claim 6 recites a color filter comprising: a filter element of a first color, said first color filter element having a filter layer of a second color overlapping a portion of a filter layer of a third color, wherein said first, second and third colors are different from each other, and wherein the second color layer is both in the same row as the third color layer and the second color layer is in a row above the third color layer.

Claim 12 recites a solid-state imaging device comprising: a plurality of light receiving sensor portions for photo-electric conversion, provided in a surface layer portion of a substrate; and a color filter provided correspondingly to said plurality of light receiving sensor portions; wherein said color filter has a filter element of a first color having a filter layer of a second color overlapping a portion of a filter layer of a third color.

Snow et al. '167 discloses a color filter array containing interlaid sets of laterally displaced filters. Referring to Figs. 1 and 2, a single row of two colors 3 is place o a substrate 1. A second row of colors is then placed on top of the first row. There is no example given such that the same color layer appears in both the first row and the second row.

In contrast, the claim recites that the second color layer, for example 8 in Figs. 1A-1C, is formed in a region in which a filter layer of a first color, for example 7, is to be formed. This forms a first row on the substrate. The filter layer of the second color 8 overlaps a portion of the filter layer of the first color 7, the overlapping portion forming a first filter element 11. Stacking a filter layer of a third color, for example 9, different from said first and second color on each of said non-overlapping portion on each of said filter layer of said first and second color; wherein two stacked filter layers form a filter element, and at least one filter element forms the color filter. Accordingly, as depicted in Fig. 1C, three different filter elements 10, 11 and 12 can be formed.

Clearly Snow et al. '167 does not disclose, teach or suggest that a color layer can appear in both the first row and the second row

A document can only anticipate a claim if the document discloses, explicitly or implicitly, each and every feature recited in the claim. Verdegall Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Since Snow et al. '167 fail to disclose, either explicitly or implicitly, at least the above-noted feature recited in independent claims 1, 6 and 12, Snow et al. '167 cannot anticipate the claim. At least in view of the foregoing, claims 1, 6 and 12 are allowable, and the rejection should be reconsidered and withdrawn.

Dependent claims 2 and 4, depending from claim 1, claims 7 and 9-11 depending from claim 6, and claims 13-16 depending from claim 12, are also allowable as depending from allowable base claims, as well as for the additional features they recite. Withdrawal of this §102 rejection with respect to Snow et al. '167 is respectfully requested.

Rejections Under 35 U.S.C. §103:

Claims 3, 8 and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,876,167 to Snow et al in view of U.S. Patent No. 5,140,396 to Needham et al. Applicants respectfully traverse this rejection.

Dependent claims 3 depending from claim 1, claim 8 depending from claim 6, and claim 17 depending from claim 12, are also allowable for the reasons above. Moreover, these claims are further distinguished by the materials recited therein, particularly within the claimed combination. Withdrawal of this rejection is respectfully requested.

Conclusion

For the foregoing reasons, claims 1-17 are in condition for allowance. Accordingly, favorable reexamination and reconsideration of the application in light of these amendments and remarks is courteously solicited. If the examiner has any comments or suggestions that would place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the number below.

Dated: February 10, 2003

Respectfully submitted,

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Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 180013 for any such fees; and applicant(s) hereby petition for any needed extension of time.

In accordance with 37 CFR 1.121 (c)(1)(ii), amended claims 1, 6 and 12 are set forth in a marked-up version below:

1. (amended) A method of producing a color filter, comprising the steps of:

forming a filter layer of a second color in a substrate region in which a filter element of a first color is to be formed; and

[stacking]overlapping a filter layer of a third color different from said second color on said filter layer of said second color and on said substrate;

wherein two overlapping filter layers form the filter element.

6. (amended) A color filter comprising:

a filter element of a first color, [which is formed by stacking]said first color filter element having a filter layer of a second color [and] overlapping a portion of a filter layer of a third color [to each other],

wherein said first, second and third colors are different from each other, and

wherein the second color layer is both in the same row as the third color layer and the second color layer is in a row above the third color layer.

12. (amended) A solid-state imaging device comprising:

a plurality of light receiving sensor portions for photo-electric conversion, provided in a surface layer portion of a substrate; and

a color filter provided correspondingly to said plurality of light receiving sensor portions;

wherein said color filter [is configured such that]has a filter element of a first color [is formed by stacking]having a filter layer of a second color [and]overlapping a portion of a filter layer of a third color [to each other].